AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-28 (Cancelled).

29. (New) An illuminated sign or panel arrangement comprising:

first and second clear light distribution plates of transparent plastic material or glass and having opposite side faces, one of the side faces of each plate being provided with a plurality of spaced apart, substantially parallel grooves extending wholly or partly along the length of the plate between a first and a second end thereof;

at least one elongate light source device extending transverse to the parallel grooves;

a light diffuser plate or display film positioned adjacent to the other side face of at least one of the first and second light distribution plates;

wherein the side faces of the first and second plates provided with grooves are placed adjacent to one another, and wherein the first and second light distribution plates have at least one light source device receiving recess on the side faces thereof provided with grooves and extending transverse to the grooves, so that when the side faces of the plates provided with grooves rest against one another, opposite recesses will provide space for the light source device.

30. (New) The arrangement of claim 29, wherein the grooves in the first light distribution plate are parallel with and immediately above the grooves in the second light distribution plate.

31. (New) The arrangement of claim 29, wherein the grooves in the first light distribution plate are parallel to, but laterally offset in relation to the grooves in the second light distribution plate.

32. (New) An illuminated sign or panel arrangement comprising:

at least one clear light distribution plate of transparent plastic material or glass and having opposite side faces, one of the side faces of the plate being provided with a plurality of spaced apart, substantially parallel grooves extending wholly or partly along the length of the plate between a first and a second end thereof;

at least one elongate light source device extending transverse to the parallel grooves and located along at least one of the ends to deliver light directly into the plate; and

an opal plate positioned adjacent to the other side face of the light distribution plate.

33. (New) The arrangement of claim 32, wherein the thickness of the opal plate is 2 mm.

34. (New) The arrangement of claim 32, wherein a light reflector plate or sheet is positioned adjacent the one side face of the light distribution plate.

35. (New) An illuminated sign or panel arrangement comprising:

at least one clear light distribution plate of transparent plastic material or glass and having opposite side faces, one of the side faces of the plate being provided with a plurality of spaced apart, substantially parallel grooves extending wholly or partly along the length of the plate between a first and a second end thereof;

at least one elongate light source device extending transverse to the parallel grooves and located along at least one of the ends to deliver light directly into the plate; and

at least one of (a) a light diffuser plate or display film positioned adjacent to the other side face of the light distribution plate, and (b) a light reflector plate or sheet positioned adjacent to the one side face of the light distribution plate;

wherein at least one of a width and a depth of the grooves increases in a direction away from the light source device.

36. (New) An illuminated sign or panel arrangement comprising:

at least one clear light distribution plate of transparent plastic material or glass and having opposite side faces, one of the side faces of the plate being provided with a plurality of spaced apart, substantially parallel grooves extending wholly or partly along the length of the plate between a first and a second end thereof;

two elongated light source devices extending transverse to the parallel grooves and located along at least one of the ends to deliver light directly into the plate; and

at least one of (a) a light diffuser plate or display film positioned adjacent to the other side face of the light distribution plate, and (b) a light reflector plate or sheet positioned adjacent to the one side face of the light distribution plate;

wherein at least one of a width and a depth of the grooves, as seen from each of the light source devices, increases until about a point midway between the light source devices.

37. (New) The arrangement of claim 36, wherein at least one of the width and depth of the grooves increases non-linearly.

38. (New) An illuminated sign or panel arrangement comprising:

at least one clear light distribution plate of transparent plastic material or glass and having opposite side faces, one of the side faces of the plate being provided with a plurality of spaced apart, substantially parallel grooves extending wholly or partly along the length of the plate between a first and a second end thereof;

at least one elongate light source device extending transverse to the parallel grooves and located along at least one of the ends to deliver light directly into the plate, the light source device including a plurality of light-emitting diodes placed side by side and arranged to beam substantially in the same longitudinal direction of the grooves; and

at least one of (a) a light diffuser plate or display film positioned adjacent to the other side face of the light distribution plate, and (b) a light reflector plate or sheet positioned adjacent to the one side face of the light distribution plate.

39. (New) The arrangement of claim 38, wherein heads of the light-emitting diodes are placed in a recess in an end edge portion of the light distribution plate.

40. (New) The arrangement of claim 38, wherein the number of light-emitting diodes corresponds approximately to the number of grooves in the light distribution plate.

41. (New) An illuminated sign or panel arrangement comprising:

at least one clear light distribution plate of transparent plastic material or glass and having opposite side faces, one of the side faces of the plate being provided with a plurality of spaced apart, substantially parallel grooves extending wholly or partly along the length of the plate between a first and a second end thereof;

at least one elongate light source device extending transverse to the parallel grooves and located along at least one of the ends to deliver light directly into the plate,

the light source device consisting of a single light emitting device which supplies a plurality of optical fibers having at their output ends, a beam direction substantially in the longitudinal direction of the grooves; and

at least one of (a) a light diffuser plate or display film positioned adjacent to the other side face of the light distribution plate, and (b) a light reflector plate or sheet positioned adjacent to the one side face of the light distribution plate.

42. (New) The arrangement of claim 41, wherein the output ends of the optical fibers rest against the end edge of the light distribution plate.

43. (New) The arrangement of claim 41, wherein the output ends of the optical fibers are placed in a recess in the end edge portion of the light distribution plate.

44. (New) An illuminated sign or panel arrangement comprising:

at least one clear light distribution plate of transparent plastic material or glass and having opposite side faces, one of the side faces of the plate being provided with a plurality of spaced apart, substantially parallel grooves extending wholly or partly along the length of the plate between a first and a second end thereof;

at least one elongate light source device extending transverse to the parallel grooves and located along at least one of the ends to deliver light directly into the plate, and

at least one of (a) a light diffuser plate or display film positioned adjacent to the other side face of the light distribution plate, and (b) a light reflector plate or sheet positioned adjacent to the one side face of the light distribution plate;

wherein a distance d1 between the grooves in the light distribution plate is a function of the thickness of the plate according to $d1 = d2 + k^* d3$, wherein d1 is the

groove mutual distance, d2 is a fixed minimum groove transverse dimension, d3 the thickness of the light distribution plate and k* is a constant.

45. (New) The arrangement of claim 44, wherein k* = 0.625 and d2 is 1.5 mm.

46. (New) The arrangement of claim 44, wherein d1 is 4.5 mm or 9.0 mm.

47. (New) An illuminated sign or panel arrangement comprising:

first and second clear light distribution plates of transparent plastic material or glass and having opposite side faces, one of the side faces of each plate being provided with a plurality of spaced apart, substantially parallel grooves extending wholly or partly along the length of the plate between a first and a second end thereof, the side faces of the first and second plates provided with grooves being placed adjacent to one another;

at least one elongate light source device extending transverse to the parallel grooves and located along at least one of the ends to deliver light directly into the plate; and

a light reflector plate or sheet placed between the first and second light distribution plates,

wherein a distance d1 between the grooves in the light distribution plate is a function of the thickness of the plate according to d1 = d2 + k* d3, wherein d1 is the groove mutual distance, d2 is a fixed minimum groove transverse dimension, d3 is the thickness of the light distribution plate and k* is a constant.

48. (New) The arrangement of claim 47, wherein k = 0.625 and d2 is 1.5 mm.

49. (New) The arrangement of claim 47, wherein d1 is 4.5 mm or 9.0 mm.

50. (New) The arrangement of claim 47, wherein a light diffuser plate or display film is positioned adjacent the other side face of at lest one of the first and second light distribution plates.

51. (New) The arrangement of claim 47, wherein the grooves in the first light distribution plate are parallel with and immediately above the grooves in the second light distribution plate.

52. (New) The arrangement of claim 47, wherein the grooves in the first light distribution plate are parallel to, but laterally offset in relation to the grooves in the second light distribution plate.

53. (New) An illuminated sign or panel arrangement comprising:

at least one clear light distribution plate of transparent plastic material or glass and having opposite side faces, one of the side faces of the plate being provided with a plurality of spaced apart, substantially parallel grooves extending wholly or partly along the length of the plate between a first and a second end thereof;

at least one elongate light source device extending transverse to the parallel grooves and located along at least one of the ends to deliver light directly into the plate; and

at least one of (a) a light diffuser plate or display film positioned adjacent to the other side face of the light distribution plate, and (b) a light reflector plate or sheet positioned adjacent to the one side face of the light distribution plate; wherein the grooves have a greatest transverse dimension in the range of 0.3 - 2.5 mm.

54. (New) An illuminated sign or panel arrangement comprising:

at least one clear light distribution plate of transparent plastic material or glass and having opposite side faces, one of the side faces of the plate being provided with a

plurality of spaced apart, substantially parallel grooves extending wholly or partly along the length of the plate between a first and a second end thereof;

at least one elongate light source device extending transverse to the parallel grooves and located along at least one of the ends to deliver light directly into the plate;

a light reflector plate or sheet positioned adjacent to the one side face of the light distribution plate; and

a display film positioned adjacent to the other side face of the light distribution plate,

wherein a distance d1 between the grooves in the light distribution plate is a function of the thickness of the plate according to $d1 = d2 + k^* d3$, wherein d1 is the groove mutual distance, d2 is a fixed minimum groove transverse dimension, d3 the thickness of the light distribution plate and k^* is a constant.